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Notice of Allowability	Application No.	Applicant(s)	
	09/434,082	RYAN, KEVIN J.	
	Examiner	Art Unit	
	B. James Peikari	2186	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED i or other appropriate comm GHTS. This application is	n this application. If not included unication will be mailed in due course. <b>TH</b>	
1. $\boxtimes$ This communication is responsive to <u>the RCE filed on Aug</u> t	<u>ust 3, 2004</u> .		
2. The allowed claim(s) is/are 5-8 and 29-71, now renumbere	<u>d</u> .		
3. $\boxtimes$ The drawings filed on <u>19 February 2004</u> are accepted by the	ne Examiner.		
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority un</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> </ul>		or (f).	
2. ☐ Certified copies of the priority documents have		on No	
3. Copies of the certified copies of the priority doc	• •	<del></del>	ie.
International Bureau (PCT Rule 17.2(a)).	oumonio navo boon rocorvo	a in this hadenar stage approached from the	Ü
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements	
5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			
6. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Revie	v ( PTO-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment o	r in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on t ne header according to 37 Cl	he drawings in the front (not the back) of R 1.121(d).	
7. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I	Sit of BIOLOGICAL MAT FOR THE DEPOSIT OF BIO	ERIAL must be submitted. Note the DLOGICAL MATERIAL.	
Attachment(s)			
1. Notice of References Cited (PTO-892)		formal Patent Application (PTO-152)	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413), /Mail Date	
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date	8), 7. 🛛 Examiner's	Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛭 Examiner's	Statement of Reasons for Allowance	
of Biological Material	9. 🗌 Other	_•	
		•	

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## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Timothy B. Clise (#40,957) on September 7, 2004.

The application has been amended as follows:

- In claim 5, line 11, delete "directly connected to the separate bidirectional data bus".
- 2. The following is an examiner's statement of reasons for allowance:

With regard to the new claim language, the previous rejection did not merely rely on bus 18 to teach the command and address bus. With regard to claim 1, for example, "a unidirectional command and address bus" in line 3 was taught in the previous office action by the two bent arrows coming out of controller 70 in Figure 9 of Katayama et al., U.S. 5,875,452, although applicant's remarks filed on August 3, 2004 do not discuss this. As for the "command and address bus" in line 14, this was not specified as unidirectional, and so this section of the bus (on the other side of the command buffer) was taught by bus 18, as pointed out by applicant.

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However, now that the claims have been amended, the section of the bus in line 14 must also be unidirectional, thus, bus 18 cannot be used, as pointed out by applicant in the remarks filed on August 3, 2004. However there is a unidirectional control line coming in to the command buffer "FROM MEMORY CONTROLLER 17" in Figure 9. It is clear that this bus carries control signals, but there is no explicit indication that address signals would be carried on this line. Consequently Katayama et al. no longer teaches this aspect of the claims and neither does Rosich et al., U.S. 5,587,964.

The examiner wishes to note, however, that there is a big difference between unidirectional in structure and unidirectional in practice. For example, a bus is usually just wire or fibers and has the innate ability to transmit data either way, even if the system that is using only sends the data in one direction. Because applicant relies so heavily on a *unidirectional* command and address bus for patentability, the scope of the claims only covers a command and address bus where a diode or rectifier or other hardware device is used to allow current flow in one direction and inhibit current flow in the other direction. Note the IEEE 100 standard for the definition of "unidirectional bus".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Peikari whose telephone number is (703) 305-

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3824. The examiner is generally available between 8:00 am and 9:30 pm, EST, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim, can be reached at (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 746-7239 (Official communications)

or:

(703) 746-7240 (for Informal or Draft communications)

or:

(703) 746-7238 (for After-Final communications)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

B. James Peikari Primary Examiner Art Unit 2186

9/7/04